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NOTE ON *NERITINA SHOWALTERI* LEA.

BY WM. H. DALL.

In February, 1861, Dr. E. R. Showalter of Alabama sent four small shells without opercula or soft parts to Dr. Isaac Lea. They were obtained ten miles above Fort William, Shelby Co., Alabama, from the Coosa River. Three of these specimens are now in the National Museum, with the original labels of Showalter and Lea. The species was described under the name of *Neritina Showalteri* by Dr. Lea, who observed that it was the first instance of the discovery of true freshwater *Neritina*, like those of Europe, in our southern waters. The note in which the description is embodied was read Feb. 12, 1861 and published in the Proceedings of the Academy of Natural Sciences, vol. xiii, p. 56, March 19, 1861, and also separately.

Since that time for many years no notice of the species as collected has come to my knowledge and I began to suspect that Dr. Showalter had been imposed upon by some one who had given him, as obtained from the Coosa River, some specimens of *Neritina fluviatilis* of Europe, to which these shells bear a marked resemblance, except that they are smaller and without any dark markings upon the olivaceous surface. It seemed very curious that a species of the section *Theodoxus*, to which *Neritina fluviatilis* is now referred, and which is notably profuse in individuals when occurring at all, in Europe, should be found only in one small stream in our Southern States and very sparsely there. Of numerous collectors on the Coosa River since

1865, none seemed to have found it. Dr. Lewis in his Freshwater and Land shells of Alabama (Geol. Sur. Ala. Rep., p. 25, 1876) gives no further information but states that in the absence of the operculum it is uncertain whether it should be referred to *Neritella* (= *Neritina*). Binney was not able to add any further information in his Land and Freshwater shells of North America. I find in one of my books a manuscript note by a very competent conchologist which declares under date of 1884 that this shell is the young of *Anculosa ampla* Anth. Under *Neritida* in the Manual of Conchology (vol. x, 1888) Mr. Tryon observes that it has not the characters of *Anculosa*, on the contrary it more nearly resembles *Neritina erepidularia*, though the coloring of the epidermis is more like that of *Anculosa* than in the other fluviatile species of *Neritina*.

For some years I have used every opportunity to seek further information about this species but without success, until lately Mr. Bryant Walker of Detroit informed me that he had found, among shells collected on the Cahawba River in Alabama, by Prof. R. E. Call, a single specimen which he had referred to Lea's species. This he was kind enough to send me for examination and on comparison with the types it proved identical, thus establishing the correctness of the American habitat of the shell which had been so long in doubt. The specimen had also the operculum, which was not that of a *Neritina*, but the soft parts had been removed.

A comparison was then made with the young of all the species of *Anculosa* in the National collection, which resulted in confirming Mr. Tryon's opinion that it could not be referred to that genus. During this search, under the head of "*Anculosa ampla*, very young" were found three additional specimens of the so-called *Neritina*, received under that name from Dr. Lewis, who in turn had received them from Mr. T. H. Aldrich who had collected them from the Cahawba River, Alabama, thus fixing a second locality for the species. The smallest of Dr. Lewis's specimens fortunately contained the operculum and dried remains of the soft parts which were put in soak and boiled in potash finally revealing an extremely minute rhipidoglossate radula, in general not unlike that of *Neritina* but not like that of any species of *Neritina* yet figured. The differences are such as would ordinarily be regarded as generic and, taken into consideration with the operculum, it becomes evident that, while the species is related to *Neritina* (and not to *Anculosa*), a new genus must be instituted to receive it.

Genus LEPYRIUM Dall.

Shell neritiform, small, thin, unicolorate; with a broad smooth-edged pillar lip; the operculum shaped like that of *Neritina* but without any calcareous layer or projecting processes; the dentition comprising a very wide rhachidian tooth with a short finely denticulate cusp, the median denticle hardly larger than the others and on each side of it a small obliquely set lateral, a broad major lateral with finely denticulate short cusp, and a short series of spatulate uncini much longer than the median teeth. Formula x.2.1.2.x.

Type *Lepyrium Showalteri* (Lea, as *Neritina*), from rivers of the Appalachian drainage in Northeastern Alabama. Types, numbers 29,016 and 102,851, U. S. Nat. Museum.

The specimen from which the radula was obtained was very small and the radula so minute, and its long uncini so tangled, that it was impossible to make a complete description or enumeration of them. The rhipidoglossate character, however, was evident, and the form of the cusps of the middle part of the radula could be clearly seen. They differ from those of *Neritina* by having a very wide and short, finely denticulate rhachidian tooth, instead of a small quadrate one with simple edges; one instead of two oblique minor laterals; in the broad and simple quadrate form of the major lateral, and the relatively smaller number and larger size of the uncini. *Anculosa* has a teneioglossate radula with the formula 3.1.3, so it is evident that this form is not in any way related to *Anculosa*.

The Oligocene of the Southern United States contains several species of *Neritina*, but none, so far as known, having a close resemblance to *Lepyrium*; which is, however, probably an offshoot from *Neritina*. The fluviatile fauna of the Coosa region contains several unique or isolated types of mollusks and the present species adds another to the list.

THE GOOSE FAIR BROOK.

BY REV. HENRY W. WINKLEY.

A curious brook, with an odd name, the origin of which I do not know. For some years this stream has formed the boundary between the city of Saco and the town of Old Orchard. The portion of it known to the writer is the last five or six miles of its course.